

ABSTRACT

Removal of biological nutrients from a wastewater yielding a low phosphorous (e.g., less than 0.25 mg/L) output includes providing a serial multistage bioreactor containing activated sludge having in hydraulic series an anaerobic zone and a downstream aerobic zone, with each zone having an upstream inlet and a downstream outlet. The wastewater is provided to the anaerobic zone inlet. A quantity of chemical sufficient to precipitate soluble and particulate phosphorous is added to the downstream aerobic zone in an amount sufficient to yield a low phosphorous output. Treated water is separated from the activated sludge and precipitated phosphorous and a return activated sludge separated from the treated water is recycled to the anaerobic zone.

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